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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,367	04/19/2001	Frederic Bauchot	FR920000029US1	9246
46033	7590	01/04/2005	EXAMINER	
IBM CORPORATION INTELLECTUAL PROPERTY LAW DEPT 11400 BURNET ROAD AUSTIN, TX 78758			NGUYEN BA, PAUL H	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/838,367	<b>Applicant(s)</b> BAUCHOT ET AL.	
	<b>Examiner</b> Paul Nguyen-Ba	<b>Art Unit</b> 2176	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Notice to Applicant***

1. This action is responsive to Applicant's Amendment and Reply to First Office Action, filed on August 23, 2004.
2. Claims 1-9 are currently pending. Claim 1 is an independent claim.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Greif et al. ("Greif"), U.S. Patent No. 5,371,675.

**Independent Claim 1**

Greif teaches a method of *applying one or a plurality of options in one or a plurality of cells in a multi dimensional spreadsheet comprising a plurality of cells identified by a cell address along each dimension* (see Abstract), said method comprising the steps of:

*defining for each option a boolean variable with a first value and a second value, preferably a "true" or "false" value* (col. 29, lines 47-67 *et seq.* → object manager implements client callback functions which return a boolean value: “true” or “false”);

*for each of said one or plurality of cells:*

*referencing one or a plurality of boolean variables* (col. 29, lines 47-67 *et seq.* → the list of boolean function argument references include: scenarios in a workfile, alternatives in a range, alternatives in a scenario, formulas in a workfile, etc.);

*associating a logical or mathematical operation with each boolean variable* (col. 1, lines 26-60 → callback type “formulas in a workfile” is associated with any combination of mathematical operations from simple arithmetic);

*for each of said one or plurality of referenced boolean variables in each of said one or plurality of cells:*

*specifying a default value, said default value being defined as the value of the cell when the referenced boolean variable is set to the first value, preferably when the boolean variable is set to the "false" value* (col. 30, lines 23-39, 62-67 → Default settings are maintained in the setting Storage Manager; i.e. “sticky” values. With a “false” boolean value, there is no need to iterate over Alternative objects);

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*specifying a delta value by applying to the specified cell default value, the operation associated with the referenced boolean variable when the boolean variable is set to the second value, preferably when the boolean variable is set to the "true" value* (col. 2, lines 25-56 → Each Alternative of the plurality of Alternatives contain a corresponding set of user entered data that is different from the first set of user entered data. The user can further designate a subset of the plurality of alternatives to form a scenario ("what-if" analysis), enabling the user to select and deselect the scenario as the source of data that is used in the spreadsheet);

*setting each boolean variable to the first value or to the second value* (col. 5, lines 15 et seq. → variable is either set to default value or Alternative values);

*for each of said one or plurality of cells:*

*computing said one or plurality of delta values* (col. 8, lines 25-43; see Fig. 5).

### **Claim 2**

Greif teaches the method according to claim 1 wherein the step of computing said one or plurality of delta values comprises the further step of:

*computing the value of the cell from said one or plurality of computed delta values* (col. 8, lines 25-43; see Fig. 5).

### **Claim 3**

Greif teaches the method according to claim 1 wherein said step of associating a logical or mathematical operation with each boolean variable, comprises the preliminary step of:

*specifying either an additive, or a multiplicative or an exclusive operation* (col. 1, lines 26-60 → i.e. "formulas in a workfile").

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#### **Claim 4**

Greif teaches the method according to claim wherein said step of specifying a delta value comprises the further step of:

*defining the delta value as either an additive increment, or a multiplicative factor or an alternate value applied to the specified cell default value when the boolean variable is set to the first value preferably when the boolean variable is set to the "true" value* (col. 1, lines 26-60; col. 2, lines 25-56; col. 19, lines 14-21 → when the Boolean variable is set to “true” value, the Alternative values can be evaluated using any user-defined formulas, including addition and multiplication);

#### **Claim 5**

Greif teaches the method according to claim 1 comprising the further step of:

for each of said one or plurality of referenced boolean variables in each of said one or plurality of cells:

*specifying whether the boolean variable is referenced in the cell by an absolute reference or not, so that any copy-paste operation performed on the cell results in a cell where the same boolean variable is referenced* (col. 6, line 1-13 → an Alternative saves all cell data in a range, so that the same boolean variable is referenced).

#### **Claims 6 and 7**

Greif teaches the method according to claim 1 wherein said steps of defining one or a plurality of boolean variables, associating a logical or mathematical operation with each boolean variable, setting each boolean variable to the first value or to the second value are executed by

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means of an *interactive user interface comprising a dialog box, displayed on a screen of a computer system* (see Figs 2-6, and 10).

#### **Claim 8**

Greif teaches a system comprising means adapted for method according to claim carrying out the method according to claim 7 (col. 4, lines 47-61).

#### **Claim 9**

Greif teaches a *computer program* comprising *computer readable instructions* adapted for carrying out the method according to claim 1 (see Title; Abstract; Claim 1 as discussed above → “programmed computer,” including instructions).

### ***Response to Arguments***

6. Applicant's arguments filed on 8/23/2004 have been fully considered but they are not persuasive.

Applicant contends that Greif teaches away from a solution involving “a Boolean variable with a first value and a second value,” by describing a “plurality [two or more] of alternatives.” Examiner respectfully disagrees.

First, Examiner points out that the “plurality of alternatives” cited in Greif (col. 2 lines 25-40) does indeed encompass only *two* alternatives. Secondly, Examiner directs Applicant's attention to Fig. 10 and col. 10, lines 24-49 of Greif. A particular “alternative” can have one of two values – True or False. By selecting the “Add” command, the user activates the selected alternative and essentially sets the option of the alternative to a True value. Conversely, if user

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selects the "Remove" command, the use deactivates the selected alternative and essentially sets the option of the alternative to a False value.

Applicant further contends that alternatives are "the source of the data is used" in the spreadsheet (col. 2), not *operations* on the data. Examiner directs Applicant's attention to the language of Applicant's claim 1. Applicant claims "associating a logical or mathematical operation." Greif does not explicitly teach associating a mathematical operation with each Boolean variable, but does teach the alternative - associating a *logical* binary operation that deals with yes/no and true/false values (see Fig. 10 and col. 10, lines 24-49; see also argument set forth above).

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Nguyen-Ba whose telephone number is (703) 305-8776.

The examiner can normally be reached from 10 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PNB

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER